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REMARKS/ARGUMENTS

Claims 1-15 are pending in this application. By this Amendment, Applicant amends claim 5.

Applicant appreciates the Examiner's indication that claims 11-13 would be allowable if rewritten in independent form including all of the features of the base claim and any intervening claims.

Claim 5 has been amended to correct a typographical error.

Claims 1, 3 and 4 were rejected under 35 U.S.C. § 102(b) as being anticipated by Marks (U.S. 3,945,532). Claims 2 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Marks in view of Muranaka et al. (U.S. 5,887,728). Claims 5, 6 and 8-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Marks in view of Jackson (U.S. 5,280,813). Claims 14 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Marks in view of Jackson, and further in view of Pollano et al. (U.S. 5,681,999). Applicant respectfully traverses these rejections.

Claim 1 recites:

"A method of measuring a material in which the material is conveyed by a conveying unit and dropped from a discharge portion of the conveying unit to be supplied into a measuring unit arranged under the discharge portion, and is measured by the measuring unit, the method comprising:

a first supplying step of supplying the material from the discharge portion into the measuring unit until the quantity of the material measured by the measuring unit reaches a preparatory measuring target value that is relatively small compared to a final measuring target-value of the material; and

a second supplying step of receiving a portion of the material to be supplied through the discharge portion into the measuring unit on a path where the material is dropping for recovery, whereby the material is supplied through the discharge portion into the measuring unit at a supplying rate that is smaller than that in the first supplying step; wherein

the material is stopped from being supplied through the discharge portion into the measuring unit when the quantity of the material measured by the measuring unit reaches the final measuring target-value.."

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(emphasis added)

Claim 6 recites features that are similar to the features recited in claim 1, including the above emphasized features.

With the unique combination of method steps and features recited in Applicant's claims 1 and 6, including the features of "a first supplying step of supplying the material from the discharge portion into the measuring unit until the quantity of the material measured by the measuring unit reaches a preparatory measuring target value that is relatively small compared to a final measuring target-value of the material" and "a second supplying step of receiving a portion of the material to be supplied through the discharge portion into the measuring unit on a path where the material is dropping for recovery, whereby the material is supplied through the discharge portion into the measuring unit at a supplying rate that is smaller than that in the first supplying step," Applicant has been able to provide a measuring method and apparatus in which highly accurate measurements are carried out in a short time, and which can be effectively applied to the measurement of a predetermined quantity of material to be removed (see, for example, the second full paragraph on page 2 of the originally filed specification).

The Examiner alleged that Marks teaches each and every method step and feature recited in claim 1. The Examiner alleged that col. 3, lines 47-55 of Marks teaches a first supplying step of supplying the material from the discharge portion 1, 2, 3 into the measuring unit 7 until the quantity of the material measured by the measuring unit reaches a preparatory measuring target value that is relatively small compared to a final measuring target-value of the material, and that col. 4, lines 10-16 of Marks teaches a second supplying step of receiving a portion of the material to be supplied through the discharge portion into the measuring unit on a path where the material is dropped for recovery. Applicant respectfully disagrees.

In contrast to the Examiner's allegations, col. 3, lines 47-55 of Marks disclose that "in operation, the source 1 is charged with material to be metered and feeding

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device 2 activated to deliver material onto the upper face of disc 3, which has been set spinning. From here the material is flung radially by centrifugal action to be intercepted by skirt 5, arresting the radial motion of the material," and col. 4, lines 10-16 of Marks disclose that "a controller 15 may be provided to which the transducer and/or integrator outputs are fed and which may be employed e.g. to control the rate of mass flow through the device."

Neither of the portions of Marks cited above nor any other portion of Marks, teaches or suggests "a preparatory measuring target value that is relatively small compared to a final measuring target-value" as recited in Applicant's claim 1, and similarly in Applicant's claim 6, or two separate and distinct steps of supplying the material at different rates. At best, Marks teaches that a material is supplied at a given rate until the desired amount of material has been supplied. Thus, Marks clearly fails to teach or suggest the features of "a first supplying step of supplying the material from the discharge portion into the measuring unit until the quantity of the material measured by the measuring unit reaches a preparatory measuring target value that is relatively small compared to a final measuring target-value of the material" and "a second supplying step of receiving a portion of the material to be supplied through the discharge portion into the measuring unit on a path where the material is dropping for recovery, whereby the material is supplied through the discharge portion into the measuring unit at a supplying rate that is smaller than that in the first supplying step" as recited in Applicant's claim 1, and similarly in Applicant's claim 6.

The Examiner relied upon Muranaka et al., Jackson and Pollano et al. to allegedly cure various deficiencies of Marks. However, none of these references teaches or suggests the features of "a first supplying step of supplying the material from the discharge portion into the measuring unit until the quantity of the material measured by the measuring unit reaches a preparatory measuring target value that is relatively small compared to a final measuring target-value of the material" and "a second supplying step of receiving a portion of the material to be supplied through the

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discharge portion into the measuring unit on a path where the material is dropping for recovery, whereby the material is supplied through the discharge portion into the measuring unit at a supplying rate that is smaller than that in the first supplying step" as recited in Applicant's claim 1, and similarly in Applicant's claim 6.

Accordingly, Applicant respectfully submits that Marks, Muranaka et al., Jackson and Pollano et al., applied alone or in combination, fail to teach or suggest the unique combination and arrangement of elements recited in Applicant's claims 1 and 6.

In view of the foregoing amendments and remarks, Applicant respectfully submits that Claims 1 and 6 are allowable. Claims 2-5 and 7-15 depend upon claims 1 and 6, and are therefore allowable for at least the reasons that claims 1 and 6 are allowable.

In view of the foregoing amendments and remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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